

Patent Claims:

1 – 13 (canceled)

14. (new) A method for operating a steam generator, comprising:
arranging a continuous heating panel of an evaporator in a heating gas channel that is cross-flown in a substantially horizontal direction of a heating gas, comprising;
a plurality of pipes of a steam generator are connected in parallel to each other and are constructed such that they cross a flow medium and are provided with a portion of a substantially vertical down pipe that can be cross-flown by a flow medium in a downward direction and with the part of a riser pipe connected downstream with respect to the down pipe on a flow medium side and is substantially vertical and can be cross-flown by the flow medium in an upward direction and the continuous heating panel of the evaporator is arranged such that one pipe of the steam generator that is hotter than an other pipe of the steam generator of the same continuous heating panel of the evaporator has a flow medium rate that is higher than that of the other pipe of the steam generator, wherein the flow medium of the continuous heating panel of the evaporator is supplied in such a way that the flow medium in the part of the down pipe of the specific pipe of the steam generator has a flow velocity which is higher than a minimum flow velocity predefined in the down pipe.

15. (new) The method according to Claim 14, wherein the flow velocity required for the entrainment of steam bubbles generated in the relevant part of the down pipe is specified.

16. (new) The method according to Claim 14, wherein the flow medium is advantageously partially pre-evaporated before entering the continuous heating panel of the evaporator such that on entering the continuous heating panel of the evaporator the flow medium has a steam content or an enthalpy of more than one predefined minimum steam content or a predefined minimum enthalpy.

17. (new) The method according to Claim 14, wherein the flow medium is advantageously partially pre-evaporated before entering the continuous heating panel of the evaporator such that on entering the continuous heating panel of the evaporator the flow medium

has a steam content and an enthalpy of more than one predefined minimum steam content or a predefined minimum enthalpy.

18. (new) A steam generator having a continuous heating panel of an evaporator that is arranged in a heating gas channel and is cross-flown in a substantially horizontal direction of a heating gas, comprising:

a plurality of pipes of a steam generator that are connected in parallel to each other and cross a flow medium and are provided with a portion of a substantially vertical down pipe and is cross-flown by a flow medium in a downward direction;

a portion of a riser pipe connected with the plurality of pipes and connected downstream with respect to the down pipe on the flow medium side and is substantially vertical and is cross-flown by the flow medium in an upward direction in which case the continuous heating panel of the evaporator is arranged in such a way that one pipe of the steam generator that is hotter than the other pipe of the steam generator of the same continuous heating panel of the evaporator has a flow medium rate which is higher than that of the other pipe of the steam generator; and

a further continuous heating panel of the evaporator is connected upstream of the continuous heating panel of the evaporator on the flow medium side.

19. (new) The steam generator according to Claim 18, further comprising a plurality of pipes of a steam generator that are connected in parallel to each other, the pipes of a steam generator are constructed in such a way that they cross a flow medium and that one pipe of the steam generator that is hotter than the other pipe of the steam generator of the further continuous heating panel of the evaporator, shows a flow medium rate which is higher than that of the other pipe of the steam generator.

20. (new) The steam generator according to Claim 19, wherein the further continuous heating panel of the evaporator is dimensioned such that in operating cases the flow medium flowing into the downstream continuous heating panel of the evaporator has a flow velocity which is higher than a minimum flow velocity required for the entrainment of steam bubbles.

21. (new) The steam generator according to Claim 19, wherein an outlet accumulator of the further continuous heating panel of the evaporator of the pipes of the steam genera-

tor connected downstream on the flow medium side is aligned with its longitudinal axis parallel to the direction of the heating gas.

22. (new) The steam generator according to Claim 19, wherein the further continuous heating panel of the evaporator further comprises a plurality of pipe sets connected in series in the direction of a heating gas, each formed from a plurality of pipes of a steam generator connected next to one another in the direction of the heating gas.

23. (new) The steam generator according to Claim 22, wherein a plurality of outlet accumulators, whose plurality corresponds with the plurality of pipes of a steam generator in each pipe set is aligned with their longitudinal axis parallel to the direction of the heating gas, and are allocated while one pipe of the steam generator of each pipe set joins each outlet accumulator.

24. (new) The steam generator according to Claim 23, wherein each outlet accumulator of the further continuous heating panel of the evaporator is integrated in an allocated inlet accumulator of the continuous heating panel of the evaporator and is connected downstream on the flow medium side in a constructional unit.

25. (new) The steam generator according to Claim 24, wherein the pipes of the steam generator of the continuous heating panel of the evaporator are connected to a common plane aligned vertical to the heating gas direction to which the inlet accumulators are connected in each case.

26. (new) The steam generator according to Claim 24, wherein the outlet accumulator is arranged above the heating gas channel.

27. (new) The steam generator according to Claim 26, wherein a gas turbine is connected upstream on the side of the heating gas.